

3300 High Pressure Feedthrough:

Allows routing of proximity probe cables through pressurized machine cases

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Since machinery vibration originates at the rotor, the best vibration measurement takes place at the rotor. The sensor of choice for this measurement is the 3300 noncontacting eddy current proximity probe. Two probes, mounted in an XY configuration at each journal bearing, provide vital information about the machine's operating condition. Often these probes must be located inside a pressurized machine case.

Certain types of rotating machinery have high internal pressure levels inside a sealed unit. The pressure may be constant or it may occur during an over-pressure condition. These machines are usually refrigeration compressors but can also be heavy industrial gas turbines or the high pressure stage of some steam turbines. Although totally separate applications, these machines share a common problem — the high pressure level must be maintained while routing proximity probe leads through the machine case. For over fifteen years, Bently Nevada has provided solutions to probe mounting in high pressure machine applications.

Our latest product offering is the **3300 High Pressure Feedthrough**, which allows you to route proximity probe cables through a pressurized machine case. The feedthrough (also



known as a "gland seal") provides the following benefits:

- Allows you to use *3300 Proximity Transducer Systems* which are noted for their high reliability, accuracy and repeatability.
- Seals a variety of atmospheres, including *Dupont's new ozone-safe refrigerants*, steam, turbine oil, natural gas, etc.
- Provides a *vacuum seal* to keep air from leaking inside the machine! Simply install the "high pressure" end on the outside of the machine.
- Three different feedthrough types available for *single, dual and triple feedthrough applications*. For example, a dual feedthrough can route XY probe cables out of the machine case at each bearing location.
- Ample pressure rating of *2.76 MPa (400 psi)*.
- Takes the place of the proximity probe's extension cable - no additional cables needed.

- Rugged materials of construction: 303 stainless steel fitting, 3300 triaxial extension cable and stainless steel connectors.
- Stainless steel armor available as an option.
- Various cable length options are available for routing the exact length of cable through the machine case.

High pressure feedthroughs have 1 inch NPT threads that are used to mount the feedthrough to the machine case at the bearing housing. The same thread size is also used on the low pressure side outside the machine which allows you to connect 1 inch NPT conduit. The conduit is then routed back to the Proximitor® housing where the feedthrough cables are connected to 3300 Proximitors.

The 3300 High Pressure Feedthrough is part of a complete line of quality transducer accessories designed for a wide variety of applications. For more information, contact your nearest Bently Nevada sales or service representative. ■